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## PLANNING CONSIDERATIONS FOR LIGHTENING THE SOLDIERS' LOAD



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***This product was developed by the Asymmetric Warfare Group (AWG) based on the collective experience and observations of unit members. The authors of this document have an average of 23 years of active military service and over 103 years of cumulative military experience. In addition, each has served numerous tours in multiple combat theaters with both Special Operations Forces (SOF) and General Purpose Forces (GPF).***

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## Introduction

The purpose of this reference guide is to consolidate well-known and validated practices through established fundamentals and principles that help manage and configure the Soldiers' load in a combat environment according to Mission, Enemy, Terrain and weather, Troops and support available, Time available and Civil considerations (METT-TC). The data contained in this guide provides a tool for Soldiers and leaders to derive ideal load set-ups for individual load carrying platforms through application of fundamentals and principles with regard to load management configurations. It will supplement, not replace, existing SOPs, doctrine, fundamentals and principles, with a reference of consolidated applicable information to help guide Soldiers and leaders through load configuration challenges.

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## Load Configuration

### Load Configuration Fundamentals:

#### Configure, Adjust, Tailor, Identify and Limit (CATIL)

#### 1. Mission Critical Configuration Items (MCCIs)

**Key items requiring accessibility while in combat firing positions** (i.e., standing, kneeling, prone) are:

- Magazine pouches
- Radio
- Marking systems
- Navigation items
- Water/Hydration systems
- Immediate self aid items (tourniquet)

**NOTE:** The items identified represent systems that are critical to conducting combat operations and providing Soldier survivability.

#### 2. **CONFIGURE** these items for ease of access.

**Ensure Soldiers configure their body armor platform and supplementary items with access in mind.** Leaders should consider allowing flexibility in configuration as long as the Soldier's ability to function properly is enhanced or un-impeded. Recognizing the impact that body type has on location and distribution of mission items is critical to Configuration. Leaders should understand Soldier physicality (different heights, weights, body shapes) affect the ability to access critical mission items. Therefore, leaders should be willing to accept each Soldier's kit configuration assessment within reason.

#### 3. **ADJUST** the load as necessary.

**Soldiers and leaders should review the mission load to ensure that combat load weight does not adversely affect operational ability and to maintain an even distribution of load across the mission profile.** If weight is not within acceptable functioning ranges, the Soldier/Leader should adjust accordingly.

**NOTE:** Adjust armor plates properly to allow maximum coverage of vital areas. Proper coverage adjustment: chest plate: one-inch below the top of the clavicle joint (base of the neck at top of chest) and one-inch above the “belly button,” back plate: one-inch below the top of back and three-inches above the waistline.

4. **TAILOR** the load for Soldier fit, form and function.

**All Soldiers and leaders should review the combat load out to ensure the fit form and function of individual platform is streamlined.** Give particular attention to the Soldier’s ability in the following areas:

- **SHOOT**

- Can the Soldier easily shoulder the weapon and accurately/effectively engage targets?
- Can the Soldier easily access and change magazines quickly and efficiently?

**“Slow is smooth, smooth is fast; speed is the efficiency of motion”**

- **MOVE**

- Can the Soldier run, climb, fit through doorways/windows and negotiate obstacles?
- Can the Soldier comfortably fit in vehicles and aircraft and maintain easy access to mission essential items?

- **COMMUNICATE**

- Can the Soldier easily access communication systems?
- Consider size of comms package
- Does the Soldier’s load impede the ability to communicate or conduct hand and arm signals?
- Can the Soldier access and employ marking systems?

- **SELF MEDICATE**

- Ensure Soldiers can easily access emergency self-aid critical items: tourniquet and Individual First Aid Kit (IFAK).
- Place tourniquets in pockets on each extremity to ensure rapid application.

5. **IDENTIFY** mission critical items for combat effectiveness and Soldier survivability.

**Use METT-TC as a guide to trim the load where possible.** Ensure the mission load items (additional to Soldier's organic individual equipment) do not impede combat effectiveness relative to configured platform. Ask yourself:

- “Do I really need that?”
- If I can't plan for every contingency, “Should I try to pack for every contingency?”

6. **LIMIT** the weight to mission essential requirements.

**Soldiers should conduct an honest assessment of the following mission critical items** to prevent overburden of extra equipment based on METT-TC and length of operation.

- **Basic Load**

- **Ammo**

- Only as required to complete the mission
- Consider accessibility to combat re-supply

- **Water**

- Soldiers should ensure that they have sufficient water to meet mission needs.

**NOTE:** Water requires special considerations; to balance against the load account for all environmental factors: weather, terrain, and mission profile requirements. Consider using water purification systems.

- **Communications**

- Batteries can produce severe weight gains if not monitored properly.

**NOTE:** Consider using lithium vs. alkaline (5590 vs. MBITR batteries)

- **Medical**

- Essential life saving medical materials
  - Tourniquet X 2
  - Curlex X 2
  - Hemorrhage control X 1
  - Cravat X 2
  - Chest seal (Asherman's) X 2

## Principles to Lighten the Load

Give consideration and thought to the following items when configuring individual kit.

### 1. ISSUED EQUIPMENT

- Armor platform
- Equipment carrying system: assault pack, rucksack
- Pouch suite
- Minimum pouch suite (recommended); Always use METT-TC to guide the load configuration
  - Ammo pouches (basic load) X 6 (can be configured in 3 X double magazine pouches)
  - Grenade pouches X 2
  - Smoke grenade pouch X 1
  - Accessory pouch X 1
  - Signal item pouch X 1
  - 40mm grenade pouch X 2
  - Water carrying system pouch X 1
  - Night Observation Device (NOD) pouch X 1
  - IFAK pouch X 1
  - Radio pouch X 1
- Amount and configuration of Pouch Attachment Ladder System (PALS) webbing

### 2. OPERATIONAL CONFIGURATION

- The operational configuration of a Soldier's kit may change from mission to mission. However, attempt to configure kit as universally as possible as to minimize re-configuration or specific mission configuration requirements.
- Commanders should allow changes and ensure carry of **essential** items.
- Rehearse the load configuration

### 3. Unit SOPs

Unit SOPs should define specific "essential" items to carry but not mandate their placement; except for IFAK, which has a specific uniform location.

4. **OPERATIONAL LOCATION (Area of Responsibility)**

Operational location may require Soldiers to carry more or less weight. Consider the use of local assets (mules, guides, bearers) to assist with logistical matters. **Always observe OPSEC**

5. **OPERATIONAL PLANNING CONSIDERATIONS**

• **METT-TC :**

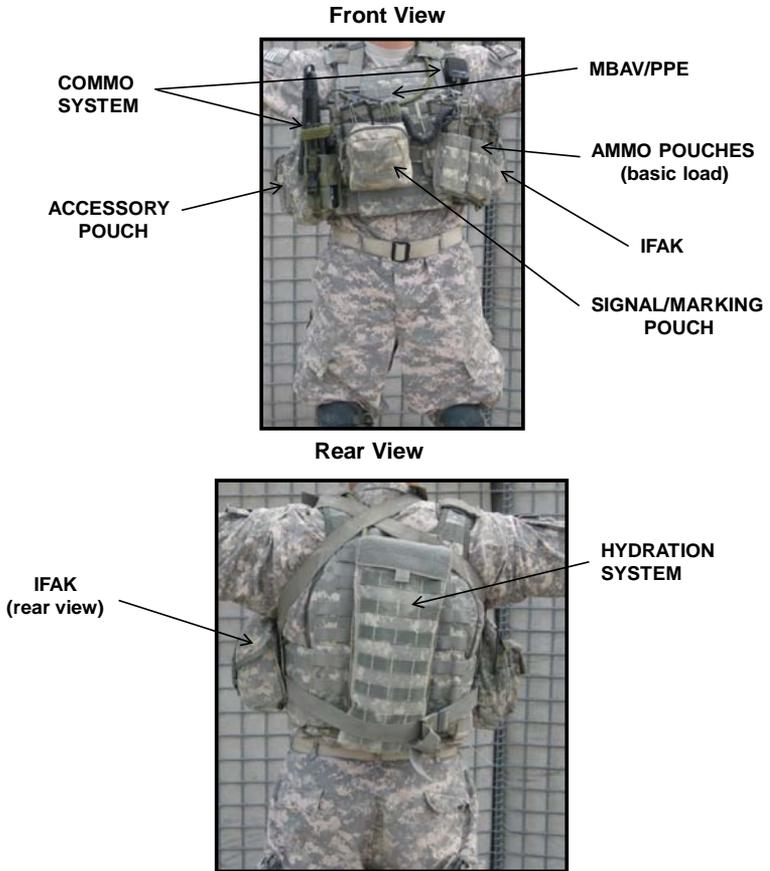
- Environment:
  - Weather
  - Heat Index/time of year
- Terrain:
  - Changes in elevation
  - Consider elevation over distance (slope)
  - Austere location - movement to target/objective from insertion platform
- Range of patrol/operation:
  - Distance covered over varying terrain under adverse weather
  - Do not overlook **HEAT** when assessing weather.
- Length of patrol/operation:
  - Predicted timeline of overall operation taking into account ability to rest and reconfigure/resupply as necessary
- Water/chow load:
  - Resupply capability
  - Amount of water and the **WEIGHT**
  - Trim MRE down to sustainment items.

## Vignette

### PROBLEM SET

A Soldier is operating in Afghanistan in rugged mountainous terrain at altitudes ranging from 2500-8500'. His forward operating timeline, given mission and execution schedule, can range from 4-72 hours, depending on the task.

- **Sample Considerations to Include:**
  - Vertical change over operating route
  - Vertical angle of operating route, up or down
  - Patrol length/range
  - Timeline for mission movement
  - Type of mission
  - Encounter possibilities with local nationals
  - Weather—Heat Index/time of year
  - Water requirements
- Figures 1 and 2 show Soldier Kit configuration utilizing METT-TC in conjunction with the above considerations.



**Figure 1. Soldier Kit Configuration Front and Rear Views**

Right Side View



Left Side View



Figure 2. Soldier Kit Configuration Side Views

## MAJ ROGERS STANDING ORDERS<sup>1</sup>

1. *Don't forget nothing.*

**CONFIGURE**

- Conduct troop leading procedures, pre-combat inspections, and adjustments as necessary.
- Have all mission essential equipment readily accessible.

2. *Have your musket clean as a whistle, hatchet scoured, sixty rounds powder and ball, and be ready to march at a minute's warning.*

**LIMIT**

- Trim the load to maximize battlefield agility - **DO NOT** take more ammo than necessary.
- All equipment streamlined and packed on your armor platform.

3. *When you're on the march, act the way you would if you was sneaking up on a deer. See the enemy first.*

**ADJUST**

- Ascertain adjustment of Soldier equipment to ensure maximum battlefield efficiency.

4. *Tell the truth about what you see and what you do. There is an army depending on us for correct information. You can lie all you please when you tell other folks about the Rangers, but don't never lie to a Ranger or officer.*

**IDENTIFY**

- Be honest with yourself and, chain of command, regarding needs to accomplish the mission.

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<sup>1</sup>Italicized, numbered items from *U.S. Army Ranger Handbook SH 21-76*. (U.S.A.:BN Publishing, 2007), xi.

5. *Don't never take a chance you don't have to.*

**TAILOR**

- Be sure not to put you and your men in situations where too much equipment will cause the patrol to have to take unnecessary chances.

6. *When we're on the march we march single file, far enough apart so one shot can't go through two men.*

**TAILOR**

- Ensure Soldier load does not interfere with proper spacing and distance. An overburdened Soldier may slow down, causing disruption in movement formations.

7. *If we strike swamps, or soft ground, we spread out abreast, so it's hard to track us.*

**IDENTIFY**

- Every mission should begin with proper map reconnaissance.
- Utilization of Google Earth or Falcon View can assist leaders to determine areas of greatest vulnerability.

8. *When we march, we keep moving till dark, so as to give the enemy the least possible chance at us.*

**CONFIGURE**

- Never reduce weight by leaving behind mission enhancing technologies, to include night vision goggles and thermal sights.

9. *When we camp, half the party stays awake while the other half sleeps.*

**CONFIGURE**

- Security is the corner stone of every combat operation.

**10. *If we take prisoners, we keep 'em separate till we have had time to examine them, so they can't cook up a story between 'em.***

**IDENTIFY**

- Have a plan for every possible contingency.
- Taking prisoners may reduce the unit's ability to move and operate.
- Make considerations to transport the prisoner out via air as soon as possible.

**11. *Don't ever march home the same way. Take a different route so you won't be ambushed.***

**IDENTIFY**

- The use of scouts and imagery is preferred for patrol leaders to determine route selection.
- No patrol should ever leave the wire without selecting primary and alternate incoming and outgoing routes.
- Always identify and disseminate rally points, helicopter landing zones, and danger areas.

**12. *No matter whether we travel in big parties or little ones, each party has to keep a scout twenty yards ahead, twenty yards on each flank and twenty yards in the rear, so the main body can't be surprised and wiped out.***

**IDENTIFY**

- Human Reconnaissance, Surveillance and Target Acquisition (RSTA) is one of the ground commander's greatest assets.

**13. *Every night you'll be told where to meet if surrounded by a superior force.***

**IDENTIFY**

- Utilization of established rally points and SOPs increase force protection and decrease the amount of time a patrol is outside the wire.

**14. *Don't sit down to eat without posting sentries.***

**ADJUST**

- Leaders should ensure loads adjustment to meet certain missions.
- Configure forward sentries as light as possible to ensure maximum mobility, lethality and stealth.

**15. *Don't sleep beyond dawn. Dawn's when the French and Indians attack.***

**IDENTIFY**

- Maximize usage of all assets. Night vision devices offer U.S. Forces a great advantage.
- Cooler weather increases combat effectiveness.

**16. *Don't cross a river by a regular ford.***

**IDENTIFY**

- Soldier's weight should not prevent negotiation of simple obstacles.

**17. *If somebody's trailing you, make a circle, come back onto your own tracks, and ambush the folks that aim to ambush you.***

**IDENTIFY**

- Lighter loads will increase situational awareness and combat effectiveness of soldiers.
- Perform basic infantry tactics such as ambush as efficiently as possible.

18. ***Don't stand up when the enemy's coming against you. Kneel down, lie down, hide behind a tree.***

**TAILOR**

- Soldier load configuration should not hamper the ability to perform basic movement techniques.

19. ***Let the enemy come till he's almost close enough to touch. Then let him have it and jump out and finish him with your hatchet.***

**TAILOR**

- The use of proper fire control measures and advanced marksmanship training will increase unit effectiveness and decrease the amount of ammunition carried.

## References

Department of Defense, *U.S. Army Ranger Handbook SH 21-76*.  
U.S.A.:BN Publishing, 2007

Asymmetric Warfare Group, *Handbook Mountain Warfare*, Fort Meade,  
Maryland, 2008

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